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ABSTRACT

This report described the development and organization of the Research Coordinating Unit (RCU) in July 1966 which was designed to unite all research efforts and resources to support a continuing vocational education program in Tennessee. Financial support was provided by the Bureau of Research of the United States Office of Education, the Tennessee Division of Vocational and Technical Education, and the University of Tennessee. The major priorities were information dissemination, research, and development of research throughout Tennessee. The project was fairly successful in information dissemination and research but was not able to stimulate much research in the State. During the first year a rational base of operation was established. However, in the second and third years financial problems severely hampered the efforts of the RCU. (EC)

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A PROGRAM OF RESEARCH AND DEVELOPMENT FOR TENNESSEE DESIGNED TO BRING TOGETHER ALL AVAILABLE RESEARCH RESOURCES TO SUPPORT A CONTINUING PROGRAM OF VOCATIONAL EDUCATION

August 1969

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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Final Report

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A Program of Research and Development for Tennessee Designed to Bring Together all Available Research Resources to Support a Continuing Program of Vocational Education

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Knoxville, Tennessee

August 1969

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CONTENTS

SECTION		PAGE
I.	SUMMARY	1
II.	YEAR ONE	3
	Study of State	3
	Workshops	4
	Operational Plans	5
	Specific Activities	6
	Summary	6
III.	YEAR TWO	7
	Development of Specific Activities	7
	Dissemination of Information	7
	Research Activities	9
	The Effect of Vocational Education on Employment Experiences in Tennessee	9
	Development Activities	10
	General Operating Plans	12
	Problems Encountered	12
IV.	YEAR THREE	13
	Implementation of Specific Activities	13
	Dissemination of Information	13
	Research	14
	Developmental Activities	14
	Problems	14
V.	BIBLIOGRAPHY	16

SUMMARY

In 1966 the state of Tennessee, in cooperation with the Bureau of Research in the U. S. Office of Education and the University of Tennessee at Knoxville, initiated a Research Coordinating Unit (RCU) to serve vocational-technical education. This report describes the three years of operation of this RCU which was known as the Occupational Research and Development Coordinating Unit (ORDCU).

The ORDCU established the priority functions of (1) Information Dissemination, (2) Research and (3) Development as its line of attack in stimulating research and development activities throughout the state. Varying degrees of success in each of these functions was experienced. Reported within were the successful experiences in disseminating information, in a tailored S.D.I. approach, as well as the less successful reviews of literature. Also described are the research projects which provided helpful manpower data to those in positions of authority for program planning. The third priority area of development is mentioned but did not receive much real emphasis due to its low ranking in the overall scheme of operation.

The results of this three years of experience have provided valuable guidelines to development of other activities and programs required to continue its effort of stimulating and facilitating research and development efforts in vocational education.

Though the ORDCU was not not a complete success, it has been shown to be worthy enough of continuation at the same location with more state support and direction. Its ranking of priority functions will most likely be altered, however, as will other aspects in its operation.

INTRODUCTION

The Vocational Act of 1963 (PL 88-210) authorized funds for research in Vocational Technical Education. This represented for the first time a clear mandate to initiate and utilize research in the betterment of programs of Vocational Education. This act authorized funds for research from two sources: Section 4(a) 6 and (b) which stipulated that at least 3 percent of each state's allotment would be used only for ancillary services and activities which might include research, and Section 4(c) which reserved 10 percent of the total Federal appropriations each year to the Commissioner to pay part of the cost of research and training programs and of experimental, developmental, or pilot programs designed to meet the special vocational needs of youth. The appropriations act which followed did not, however, reflect this commitment to research.

When the monies which were finally appropriated became available it soon became apparent that the field of Vocational Education was not adequately structured to make full and effective use of this new resource. A new concept known as Research Coordinating Units (RCU) was therefore created through requests for proposals to be submitted by the various states to the Bureau of Research, United States Office of Education. Since 1965 there have been established forty-seven such new agencies.

The purposes of the RCU were described in the request for proposals as including:

1. Stimulate and encourage occupational education research and development activities in state departments, local school districts, colleges and universities, and nonprofit organizations.

2. Coordinates occupational research activities conducted within the state by the agencies noted above, and with those being conducted outside the state.

3. Disseminate information on the progress and applications of the results of occupational education research.

4. Stimulate activities which will result in increased interest and improved competence in research such as encouraging pre-service and in-service training of occupational researchers.

5. Participate in the development, monitoring or conduct, as appropriate, of occupational research and development projects supported by Federal, State, local, or private organization funds.

6. Identify and maintain an inventory of available occupational research and development resources in light of anticipated needs and programs within the State.

7. Survey available data on employment opportunities, emerging occupational trends, and future job projections, as a base for planning vocational programs, curricula, and facilities within the state, and teacher training, recruitment and placement.

8. Identify issues and problems relating to the nature and place of vocational education in the state school system, and determining the contributions which occupational research and development could make in resolving them.

The proposals which resulted reflected the great diversity in program development, available state resources and needed activities for program improvement among the various states. This seemed appropriate when one considered that the 1963 act represented the first real recognition of the need for research and research related activities in Vocational Education. In some states a research orientation had already been established while in others the availability of these monies was needed before research related activities were deemed relevant to Vocational Education.

The RCU in Tennessee was established in July of 1966 and began operations in September of that year with the employment of a director. The newness of the RCU concept disallowed tradition as a guide for operation. The diversity between states limited the utilization of older RCU's as patterns for the newer units. The special needs, resources and programs of Tennessee required a program of activities tailored to these unique characteristics. In addition to these factors the willingness of the Bureau of Research, USOE in allowing differences in operation resulted in a program of research and development for Tennessee designed to bring together all available research resources to support a continuing program of vocational education. It must further be stated that the RCU concept was perceived as an experimental activity and therefore all units were funded for an initial period of three years after which they would either be discontinued, taken over by the respective state or otherwise altered to reflect the experiences gained during the period of trial.

As was the case in several situations the Tennessee RCU was designed as a triumvirate including the State Division of Vocational Education; the College of Education, University of Tennessee; and the Bureau of Research, USOE. After due consideration of the factors described above and in consort with the appropriate representatives of the agencies mentioned it was decided that the Tennessee RCU would utilize the time and resources available in a three phase operation. The first phase of analyzing and interpreting the needs, resources and programs of the state would in general be conducted during the first year of operation. The second year of operation would be devoted to the development of plans for specific activities and approaches to be conducted during the last year of operation - phase three. There were, of course, many instances when these overall plans were not followed due to special needs and opportunities. The general pattern of operation, however, was intended to follow this allotment of one year for analyses and study, one year for planning and one year for trial operation. It was expected that this approach would yield the greatest experience and guidance for the future of research activities in the State of Tennessee.

This document describes the activities and experiences of the Tennessee RCU which took place during the period of July 1966 to August 1969 in the attempt to establish a program of research and development for Tennessee designed to bring together all available research resources to support a continuing program of vocational education.

Year One

The first year's operation of the Tennessee RCU began with great enthusiasm and expectations. Many persons anticipated different and varying results and accomplishments while others were completely unaware of its existance, either as a concept or an actual entity.

Resulting from the requests for proposals distributed by the Bureau of Research, USOE in 1965 and 1966 the Tennessee Division of Vocational-Technical Education prepared and submitted a proposal for consideration. This proposal was rejected and resulted in a request of the College of Education, University of Tennessee to prepare and submit a similar proposal. The deadline date was immenent and therefore within a week a proposal was developed by two persons in the Deans' office with advise regarding specific activities coming from a representative of the State Department. This proposal was accepted.

This proposal for the Tennessee RCU followed the guidelines provided by the Bureau of Research in calling for a cooperative arrangement reflected in the financial matching pattern which was:

	FY 67	FY 68	FY 69
College of Education, University of Tennessee	5%	12.5%	25%
Division of Vo Tech (fennessee)	5%	12.5%	25%
Bureau of Research (USOE)	90%	75%	50%

Study of State

Immediately following the employment of the full-time director and his initiation of staffing and facilities activities the units prime concern was the study of resources, needs and programs of Tennessee. The activity took the form of extensive interviewing with persons most directly involved in vocational-technical education.

The director interviewed the head teacher educator of each department of vocational-technical education in the College of Education. At the same time several extended conferences were held with the Dean and the Assistant Commissioner of Vocational-Technical Education. These conferences either included or lead to interviews with other key persons working directly with the Dean or the Assistant Commissioner.

In September of the first year the director was invited to present a short description of the ORDCU* and its purposes to a joing meeting of teacher educators and state supervisory staff in vocational-technical education. Following this general presentation the director met with small groups representing each field. These small group discussions resulted in many suggestions for specific activities in which the unit might be involved.

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*Occupational Research and Development Coordinating Unit - The name given to the Tennessee RCU.

They also resulted in a clear indication of the great diversity of interpretations as to the nature and content of research and developmental activities.

Several other conferences and interviews were held in order to better know the state through the eyes of persons having long and varied experiences with its programs, needs and resources. These conferences and interviews included persons outside the fields of vocational education as well as those within.

In addition to interviews with persons within Tennessee others from both the National and State level were consulted for input to program design. This included the project officers, others in DCVER and others in RCU's throughout the southeast.

Workshops

A series of four one-day workshops were held in early spring of 1967 for the express purpose of obtaining greater specificity of direction for the ORDCU. The initial conferences and interviews resulted in great diversity of interpretations and provided little specific or common direction. It was deemed desirable therefore to initiate formal meetings of all persons most directly involved in the administration and supervision of state programs of vocational education.

These four workshops were presented in each of the three regions of Tennessee and one specifically for teacher educators held at the University of Tennessee. The participants included state supervisory personnel, teacher educators and selected teachers representing the local level. The workshop began with a review of the roles of research and development in the change process. This included the agricultural change process (Rogers), a study of educational change in a state (Brichell) and the Guba-Clark schema of planned educational change. The purpose of this review was to illustrate the research-development-implementation continuum which was perceived as applicable to the concerns of the ORDCU.

This review of change processes and the resulting discussion led to the next phase of "idea identification" and development. Here the purpose was to "brainstorm" and identify those problems and needs relevant to the improvement of vocational education in Tennessee through research and development. (This session was conducted cooperatively by the ORDCU director and state supervisory personnel.)

The third element in the workshop comprised instruction and direction on proposal development and funding. Included in the presentation was (1) Sources of information including the State Department, ORDCU, Wisconsin Information Center and ERIC; (2) Mechanics of proposal writing; (3) Technical assistance available; and (4) Requirements of state level funding. The workshop was concluded with an invitation by the ORDCU director to utilize the facilities and staff of ORDCU in preparing and submitting plans for research and developmental activities.

The results of these four workshops were published in a thirty-two page bulletin entitled Program for Stimulation and Development of Research and Innovation, Phase I Workshop Report.(1). These bulletins were distributed to all participants as well as those few non-participants employed in supervisory or teacher education positions.

The results of the workshop as well as the conferences and interviews indicated a multitude of avenues for exploration and development. Obvious in its absence, however, was a common area for concentration of effort.

Operational Plans

As a result of these extensive efforts to analyze the needs, programs and resources of the state several general conclusions were made. Of prime importance was the fact that there existed no extensive base of research or development agencies or personnel. There also was no lack of possible avenues open to research and developmental efforts to improve the states' programs. In addition there existed no formal agency or activity which was committed to and could provide the catalytic role necessary in a broad program of research and development.

For these reasons it was determined that the RCU could contribute most by facilitating the research and development roles of others. Since little research or developmental activity was underway it seemed more appropriate to assist other people to initiate such activity than to devote the resources of the unit solely to the conduct of such activities. (It was concluded that if the efforts of the unit were devoted to the conduct of research projects per se then little would be accomplished in bringing about such activities on the part of others.)

The unit therefore became process oriented rather than product oriented. Considering the continuum from research to implementation three processes were identified for emphasis. These consisted of Research, Development and Dissemination of Information. Recognizing the status of the state it was further decided that dissemination would be assigned first priority. If dissemination of research and development were adequate then implementation might well take place in the absence of local research and developmental activities. This discussion was based partially on the assumption that adequate and valid research and development information existed outside the state which would have implications for programs within the state.

Research and developmental activities would still take place within the RCU but these would receive secondary priority. In addition the original thought of moving slowly with one year devoted to analysis, one to development and one for trial was maintained.

Another prime consideration in development of this plan of attack was the desire to facilitate the performance of the activities assigned to the various existing personnel and agencies rather than compete with them.

Specific Activities

In addition to these general policy oriented activities there were several more specific activities initiated during this first year. Two proposals were begun; one dealing with development of a comprehensive information system (Automatic Information Flow System) and one dealing with a study of perceived roles of occupational educators within the state of Tennessee. Development of these two proposals continued into the second year of operation.

Also begun during the first year was an interpretive study of women in the world of work. This review of the literature continued into the second year as well.

One activity of prime importance was the establishment of an advisory council. This advisory council consisted of ten members with the Dean of the College of Education, University of Tennessee and the Assistant Commissioner of Vocational-Technical Education serving as ex-officio members. These ten persons represented the fields of agriculture, home economics, labor, employment, vocational education, technical education, health, commerce and industry.

This council met for a day and a half and discussed the various concepts and proposals discussed above. The reactions were generally positive and another meeting was scheduled early in the second year to obtain more specific reactions.

Summary

In general the first years activities seemed appropriate and well received. A rational base of operation appeared to have been established as well as specific activities being initiated which showed promise. The unit was eventually fully staffed despite many problems and delays. The general conclusion that the results of the first year's activities offered promise was held by most of those involved.

Year Two

The second year of operation began with a greater degree of confidence in regard to the general direction of development for the ORDCU. It appeared to be the general consensus that the first year of "getting to know" the state had led to identification of those activities in need of development and implementation. It was further agreed that a year could well be devoted to such development and initial implementation. Also it seemed agreeable to emphasis information dissemination with research receiving second order priority and development third order priority.

Development of Specific Activities

During this second year of operation there were initiated nine major activities. Five of these dealt with the dissemination of information function of the ORDCU, three were of a research nature and one was a combination of development and information.

Dissemination of Information

This function, as mentioned earlier, was given major priority and consisted of five types of activities. The first activity dealt with further development of the Automatic Information Flow System (AIFS) proposal. This concept proposed an information system which would combine technical data (program data) with document information (program approaches) and a built-in systems evaluation and data analysis section. Quite a bit of work was devoted to this proposal but little of a practical or operational nature was accomplished. With the assured accuracy of hindsight it is clear now that the proposed system was much too grandiose and "risky" for the existing situation.

A second major activity implemented during this second year, in purely a developmental manner, was the publication of "ORDCU Blurbs". Despite the usual immediate reaction to a name such as this, one need only check the definition of the term to appreciate its accuracy. The process involved was an audience oriented selective dissemination of information service.

In November of this second year a number of these ORDCU Blurbs were distributed to the formal leaders in the field of vocational-technical education. These ORDCU Blurbs consisted of one paragraph abstracts of documents reporting research or developmental activities. These abstracts were not mailed in mass, however. They were first categorized according to the type of audience to whom they would be most relevant. (There were approximately sixteen such distinct audiences identified within this group of leaders.) In this manner only those documents of greatest relevance to the various audiences were brought to their attention - in the briefest form possible. The members of the audience were then invited to request the complete document for any of the abstracts which had particular relevance to them.

A major input to this dissemination effort was the very young ERIC system. This fact resulted in the major shortcoming of the system, i.e., the backup system was inadequate to meet the needs without a great delay in time. It was soon obvious that several mailings of ORDCU Blurbs had been received by the receipient before he had received the documents requested from the first mailing. This needless to say resulted in some lack of confidence in the system. In addition the document had to be provided in hardcopy form rather than microfiche due to a complete lack of readers.

The ORDCU Blurbs did provide many fine experiences which helped immensly in the further development of the system. It also led to the next major accomplishment within the dissemination function of ORDCU.

In the spring of this second year the Assistant Commissioner of Vocational-Technical Education agreed to finance the development of an ERIC oriented information center within the ORDCU. This financial support not only made possible the purchase of the complete ERIC microfiche collection but also the necessary hardware to facilitate its use. This hardware consisted of three microfiche readers to be placed in the three regional offices of the state supervisory staff; one reader and one reader printer in the state central offices of the supervisory staff; and one reader, one reader printer, one microfiche reproducer and the necessary filing cabinets to hold the fiche which were all located in the offices of the ORDCU.

This purchase provided the state of Tennessee with one of the best equipped information systems within the field of vocational education at that time. It also assured a more effective selective dissemination of information system in that now the backup documents could be made available immediately.

At the same time that the AIFS proposal, ORDCU Blurbs and information equipment and materials activities were being conducting another major aspect of information dissemination was underway. This activity dealt with the interpretation and packaging of information into ORDCU Reviews. The first such review started was a literature review of womens role in the world of work. This resulted in a published document entitled "Women in the World of Work." (2) This review not only interpreted the literature but also provided instructional guidelines and materials. Another review which was started shortly after this had as its topic the school dropout. This review was also published in the spring of 1968 and was entitled "Dropouts: A Challenge to Society."(3)

Yet another review, which was less a literature review than a research project, was published at the same time and entitled "Major Sources of Social and Economic Data in Tennessee." (4) The approach here was to identify the agencies which collected and published periodically data which would likely be helpful to vocational educators. Some fifty such agencies were surveyed with forty-nine being included in the document.

Another type of information disseminated was a trial effort to assess the desirability of inventoring agencies within a community dealing in the area of occupational education. This inventory consisted of the major

public agencies providing some type of training programs in the Knoxville, Tennessee area. It included such agencies as the Apprentice Bureau, Opportunities Industrialization Center as well as the public school offerings in vocational and technical education. Such an inventory proved very helpful and useful to many varied persons and agencies. It was not, however, considered to be feasible for the ORDCU to take on such a development in other areas of the state.

Research Activities

There were three activities also carried on during this second year which could more clearly be classified as research. The first was the further development of the proposal for an organizational role study within the area of vocational education. This proposal was considered not only as a well designed research study but also a study which would provide much practical help in facilitating the effective performance of the various jobs within vocational education. It was considered such by all but the funding agency.

A second, more successful research effort, was a proposal for a human capital study. This proposal was submitted to and largely funded by the State Division of Vocational-Technical Education and is still underway.

The Effect of Vocational Education on
Employment Experiences in Tennessee

This investigation is being made to assess the effects of vocational training received at Tennessee Area Vocational-Technical Schools upon the employment experience of recipients.

A random sample of approximately 300 former area vocational school students (the experimental group) was drawn from school records. These subjects were then matched with a cohort group (the control group) of subjects similar in all measurable respects (sex, race, age, high school and curriculum, grade-point average, IQ and family's socio-economic status) except for vocational training received at an area vocational school.

In February 1969 each member of the study population (including an additional 400 former area school students who will not be matched with cohorts) will be contacted by questionnaire to obtain information on income, unemployment rate, geographic mobility, occupational mobility, industrial mobility and biographic background. In addition, each subject will be requested to sign a Social Security authorization card which will allow the investigators to examine the subjects' Social Security earnings records, thus providing an accurate measure of earned income during the period of years under study.

Comparisons will be made among the subgroups receiving different types of vocational training, but particular emphasis will be placed upon a comparison of the experimental group with the control group in terms of income, unemployment and occupations, industrial and geographic mobility. A rate of return on the investment in training (public and private costs) will be computed by amortizing the investment from earnings differentials of the workers receiving vocational training (assumed here to be positive) over their expected working life. Also a procedure will be developed to allow continuous follow-ups of former students in order that an ongoing evaluation of specific programs may be made.

The final publication will be made available through the Tennessee Division of Vocational-Technical Education, who has funded over 85% of the cost of the study.

OBJECTIVES:

1. To provide the public (with particular reference to policy makers and legislative bodies) with a demonstration of the effects of vocational training.

2. To provide administrators and educators, particularly those responsible for planning and the allocation of funds, with a specification of relationships among alternative training investments and and employment experiences.

3. To provide immediate evaluation of the effectiveness of the various training programs and to provide an on-going method for continued evaluation of future training programs.

4. To provide relevant and timely information useful in student guidance and counseling.

In addition to funding this long range study the Assistant Commissioner requested the help of the ORDCU in obtaining manpower data on which to base the states annual plans. This study utilized the available labor data by Standard Industrial Code (SIC) classifications and translated it into labor data by Office of Education Instructional Classifications. Though there were many sources for possible error it was by far better data than most states were able to generate in the spring of 1968. (The tabulation of the data were presented in the progress report of the period of January 1968 to December 1968.)

Development Activities

Another major activity which was implemented in 1968 was an interpretive study funded by the USOE. Though this activity was primarily an information activity at the national level it also served as a developmental activity at the local level.

This study was entitled "Interpretive Study of Cooperative Efforts of Private Industry and the Schools to Provide Job-Oriented Education Programs for the Disadvantaged". The purpose was initially threefold:

1. To conduct a survey designed to determine what cooperative efforts are being made by private industry and the schools to provide job-oriented education for the socially, educationally and economically disadvantaged;

2. To compile the results of this survey in a form that the layman will find useful; and

3. To conduct three seminars in selected urban communities in order to make the survey results known to a group of the community's business and education leaders who are in a position to apply their findings to the development of job-oriented education programs in their community.

Businessmen have recently been challenged to take the lead in making the disadvantaged employable and productive, but the education community is a logical and potentially powerful ally in this endeavor. Moreover, the impetus which may be provided by industries seeking help with job-oriented education programs can produce more efficient approaches to vocational education in the schools. Providing an extensive comparative collection of data on existing job-oriented education programs that have been established for the disadvantaged by private industry and the schools acting in partnership will be useful in arousing the awareness of businessmen and educators to the possibilities of such programs, in presenting ideas on the most effective methods of providing job training and education for the disadvantaged, and in helping to eliminate duplication in areas where industry and the schools have similar training objectives.

Leaders in the areas of personnel work and training in industry and vocational education in the schools will be asked to serve as consultants in identifying the kinds of information that should be included in a questionnaire designed to give businessmen and educators a clear picture of existing cooperative job-oriented education programs. Research will be conducted to determine where such programs are operating and questionnaires will be sent to the appropriate companies and school systems. Information obtained from completed questionnaires will form the basis for an extensive report on existing programs.

In the second phase of this study three urban communities in which there is a recognized need for job training for the disadvantaged will be selected as sites for seminars. Proposed sites include New York City; Knoxville, Tennessee (an urban community within Appalachia); and a third city in the western part of the country where migrant workers or American Indians constitute a significant segment of the disadvantaged population. A representative group of businessmen and educators in each of these communities will be identified and invited to attend a seminar for the purpose of discussing the prepared report on existing cooperative job-oriented education programs and its implications for their own community. The report on these seminars which will be prepared will contain information regarding

the media and techniques likely to prove most effective in acquainting representatives of private industry and the schools in other communities with reference material produced as part of this study.

This project has been continued and expanded and is now slated for completion in March of 1970. It is no longer serving as a developmental effort at the local level but rather a training and dissemination activity at the national level.

General Operating Plans

The second year illustrated that developmental efforts often result in many subsidiary activities. Though the second year was primarily designed for development of processes it also saw study of new areas for involvement as well as production of specific products.

The advisory council subscribed to the priorities mentioned though they did warn of overextending the unit. This warning may not have been heeded as much as it warranted.

Problems Encountered

There were three major problems encountered during this second year of operation. The first dealt with staff responsibilities. It was experienced that a competent researcher wants to do research rather than facilitating or stimulating such related activities on the part of others. A conflict, therefore, arose in that the units goal was to stimulate research and development efforts on the part of others but the staff much preferred to be completely involved in their own research interests. These statements are not intended to criticize but rather to illustrate a real problem which must be dealt with!

A second major difficulty was the units commitment to serve those persons in formal leadership positions. It was felt that these people would provide a multiplying effect by further utilization of the units products and services in the performance of their professional duties. This did not appear to be the case.

The third problem which came to light in this second year, but which primarily affected the third year of operation, concerned the financial support of the unit. As discussed earlier the cost-sharing procedures called for 50% to be furnished by the USOE, 25% by the state and 25% by the University. It was discovered that the university could not meet its original commitment to the extent stated in the proposal. This therefore, resulted in a drastic reduction in the total amount of money available to the unit - for each dollar contributed to, or withheld from, the unit by the university was matched by two dollars from the USOE and another from the state. This problem, needless to say, affected the third years operation of the unit.

Year Three

The third year of operation began with an attitude much less optimistic than existed the previous two years. Nevertheless the director of the unit felt confident that the types of activities in which ORDCU was engaged were worthy and should not be discontinued but rather cut back somewhat due to the change in the financial situation.

Implementation of Specific Activities

Dissemination of Information

The units' experiences with the ORDCU Blurbs, though less than a smashing success, were deemed adequate to warrant further development and expansion. Toward this end the concept and procedures were presented to representatives of eight nearly southeastern states as a possible cooperative activity. This discussion took place in September of 1968 and resulted in three major changes. The first was a change to a more "sophisticated" name. The original ORDCU Blurbs became RCU/SDI which of course stands for Research Coordinating Unit/Selective Dissemination of Information. A second change was an expansion of the original number of audiences to a total of 45 distinct audience groups. The third change of major importance was the decision to prepare and publish this in a cooperative manner.

The cooperative arrangement involved classification of ERIC documents to the various audience groups by different states. (Each state classified the documents contained in two issues of RIE while Tennessee also classified each of the same issues.) In addition it was agreed that the RCU/SDI would be composed by ORDCU in a manner which then allowed each state to add its name so that the final publications each appeared to have originated in the respective states. (There were other changes in format and procedures but in essence the preceeding discussions should be adequate to convey the nature of the RCU/SDI activity.)

This approach to cooperative dissemination of information on a selective basis was well received by those states able to "tool up" quickly. The other states found that there was not adequate lead time for effective implementation. The general conclusion, however, is that this effort shows much promise and must be carried in by some agency.

Another activity which was performed during this year dealt with the retrieval of information. In its concern with information the ORDCU had developed the procedures, facilities and instructional programs for information retrieval utilizing the various search strategies made possible by the ERIC configurations. Though such retrieval was done by hand rather than computer it was the same process. A total of 126 graduate students utilized this potential and found it extremely helpful even though it was very time consuming. The information systems utilized in these retrievals were ERIC, DATRIX, (University Microfilms) and DDC (Defense Documentation Center).

In addition to providing the instruction, facilities and processes for self-conducted retrievals the ORDCU cooperated with the Bureau of Educational Research and Service in providing a person to conduct searches for faculty of the College of Education. This service was initiated in January of 1969 and was used by about 10 faculty members in conducting 34 searches.

Instruction in these information services was presented to 331 graduate students at the University of Tennessee. In addition each of the 23 area vocational school staff were provided this instruction as well as a description of and instruction in the use of the RCU/SDI.

Research

The research activities conducted during this year consisted of continuation of the study "Effects of Vocational Education on Labor Force Experiences in Tennessee," the design and use of a computer program to estimate the demand for non-bacculaureate occupations in Tennessee, and design and use of a technique to rank the 95 counties in Tennessee. The first study was reported in the previous section.

The second activity was similar to the service performed for the state the previous year but differed in that the computer was utilized to a greater extent and other alterations were made to assure that more valid data were incorporated. The results of this effort were utilized in preparation of the State Annual Report and the Labor Demand Survey (USOE).

The third activity ranked each of the 95 counties on employment growth potential. These data will but utilized to determine partially the allocation of funds to local districts.

Developmental Activities

As part of the interpretive study contracted between ORDCU and the Bureau of Research, USOE, a seminar on disadvantaged and jobs was held in Knoxville in January, 1969. As a result of this seminar, several activities involving the Chamber of Commerce, Urban League, Community Action Program, NAB-JOBS program, TVA, and county and city vocational education have taken place. All these activities have been directed toward initiating new programs to aid the disadvantaged in becoming productively employed.

This interpretive study has resulted in several publications but only one has been cleared for general distribution. (5)

Another project was designed for implementing the exemplary programs part of the 1968 Vocational Education Amendments. This proposed approach was entitled "Project IDEA" but was not accepted by the State Division of Vocational-Technical Education.

Problems

The major problem faced during this last year of operation was the need to reorient the original plans because of the reduction in finances.

This combined with several other problems relating to staffing and communications resulted in changes which in the opinion of this writer are very detrimental to the long-range goals originally set by the Tennessee RCU.

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